## This Page Is Inserted by IFW Operations and is not a part of the Official Record

## **BEST AVAILABLE IMAGES**

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

## IMAGES ARE BEST AVAILABLE COPY.

As rescanning documents will not correct images, please do not report the images to the Image Problem Mailbox.

TCTAGAATAT AGAAGATAAG TTTGCGTACA ATTCAGTCCT TTGAAGACCT GATAAGCTTT AAGAAGGAAG ATGGGTTACA CATTGGGAAA TGGTTGCAAT CTGCACATGG CAGAGGCAAG AGATGCAAAT CACATTTCTT ACATACTCCA -6510 TACAAATCTT ACAAGACTGT TTTTCTTTCT CATTTAAAAT AAGAAGACCT GCCAGTCTTC CCCTTATTAC TAATTACAGT CACTCTGTAT CTTTGTTGAC ATTGGATAGT TTTACATACT TCAACAGGCT GGTGTCATTA AAGTTGTGGT GGGTGGGCAC CAGAGACACG TGATTCAGAG TGGGAGGAGA TGCAGGAGAA ACGAGGCACA GCAGAAGCAG AAGCGAGGAA AAACACTCTC AACGTTACTA ACACATCGAG AGGTTCCGCA CACTAGCAAT ACGGGCTGAA TCTGACCTAA TCTCTGCTGT TGAAAATTTT GCCTAGCCGC ACACTAGCAA TACGGGCTGA ATCTGACCTA ATCTCTGCTG TTGAAAATTT TGCCTAGCCT GTCACACAAG TGCTGAGCAT ACAGAAAAAG GAGAGTAATT CTCTGGTTCT TTGACTAACC AAATAGTCTA TATCAAATTG CCTAAGATAA TGTATACATT TAGTACATGA -6010 CTGGTTATAC CTATTCTATA TGACTATTAT TTAAATGTGA ATTTACAAGT GAGCATATGA AGTCCATTTT ACATGGCTAG TACATATAAC TTTTAAAAAG TTGGACATAG TTATATTTT CCATTTATTT ATTTACTTTA TATCCTGATC ACAGACCCCC CCCTCCTCTG GATTAACTCT CTCCACTGCT TCTTACCCCT CCCCATCTCT CCTTCACCTC TGAGAAGGGG GGATACCTCC TGTCTTATCT GGTTTCAGTG GGAGAAGGAT GTATCCTAAC ACATATAATT TTTAATATCC TGAGTTTTTC TTTCATACAC CTTACTTATT CTATTCATTT TTCAGGAAGG CATGTTTAAT GTTTTTTTT TAATTTTATG TGTACGAGTG TTTTGCCTAC ACAGTCATAG TGCATCGCAT ACATTTTTGC TGCCCGTAGA GATCAGAAGG GAGCATTGGG TTCCCTAGGA CTGGAGGCAT GAACCACCTT GTGGGTGCAG AGAACTGAGC CTGGGTCATC TCAAAGCATC AGGTTCTTCT TGAGTCATCT CACTTGCCAC TTCTCCCATT TACTGATTTT ATCTGTGTGC AGACATTCAT GGCCCAGTCC ACAGGTGGAA GTCAGGGACA ACCTATAGGA GTCAGTCCTC TCCTTCTACC GTGTGAGTCC CTGGCCTCAA ACTCAGGTTG TCGGGCTTCA

Figure 1

TAGCAAGAGC TTCTATTTGT TGAGCCATCT TGCTAGCCCC ACCCCATACT ATCTTTATAA TATCTGTTTA ATTAAGACAT TCATAATGAA TTTTATTAAC ATTCATCGTT ATCCCCTTTA CCAATTTTAC TATGTATTAA TTGCCACCCC TTTAAATTTA ATTACTTCCT TGGCTGGGTT TTACAGGAGA GTTCCAGGAA GCTAGATGGA GAGATGGCTC AACAGTTTAG AGCAACGGCT GTTCTTGCAG AGGACCTAGG TTCAAGTCCT GGCACTCAGA GGTGGCTCAC AATCATCTGT -5010 GACTTCAGTT CCAGGGGATC TGAAGAATTC TTCTGGGCTC CATGGGCATC AACTACACAC TTGGTTCATA GACATACATG CCAGCAAATG ATTGATCCAT ACATATGAAA TAAACCATAA ACAGAAAAA AAAAGGAAGG TGAGGGAAGG ИНИИМИНИИ ИНИИМИНИИМ ИНИИМИТСТСТС САТАСТGAAA GATGTCCACA ATGACTAAGG GAATTTTTTT TAAAAGACAA GCACAACGTT TTCTAGGGAT CAAACTCTAT TTGTGAGGAA GACTGGTGGT TTGAAGATTA CATAGCAGAG TTACATCTAA CATGAGCGTG TTTCCCCTGG ATGGAAGGAG TCTGATAACT TGTCTTTCTT TCTTAGTTAG CATCTCAGAG TCCCCCGCCT CCCTTAACAT CCTTTTTGCA CACCATCTTT TTAGGAAAAT GGATCATTTA TGGGGATGTA GTGATTTGTA CAAGAATGTC CCCTGTGGGC TCAGATATTT GAATACTTAG TTCCCAGTTG GGGGAGCTTT TGTAGGGAGG TTGGGAGGCA CAGCCTGGCA GGAGGAAGCA TGCTAGCAGC TTTGAGACTA TAAACCCTCA TCTACTACCT TGTTCTCTTT CTGCATTGTG CTGTGTCTGA CACTGTGAGA TTCCTGCTCC CGATGCCATG CCTGCCCGCC ATGATAGACT CCTAGCCCTC TGGAAAGGTA ACCTCAGTGA ACTCTCTTCT ATAAGTTTCT TTGCTCCTGG HindIII (-4200)

TGTTTTATCA CTGAAACGGA AAAGCTTGCA GGGAGGTAGG AGGCAGCCTG

Figure 1 continued

TGGCGTTGAT TCAATGCACC TGGCCTTATC CTCGGATGAG ATCGGTCACC AGTCAAAAAC TGTGAGCTTG AAGGTCTTGG GTGCTTAACA TCTATTTTTA CAAATCTTAT TTAGCAACTT AGAACTGTGA AATATTGGAA AGCTACTTAA -4010 ACCTTCTAAA CTCCCTCCTC CACACTATGA GAATGTTACA TTTTCTATTC AGTTATTTTT GAGCAGTAAA CAGATGAATC AAGGAATATG CCCATCACAT CAAGAGTGCT CCTAAATGGA CTTGCTTGTT ATTCATTTAC AGTGTGGCCC CTTGACTTTC ATCGGCACTC CTAGCAGAAA ACAAAATCCG CCAGATGGAG CTGGAGAGAT GGCTCAGCTG TTAAGAATAC TTATCCCTAC ACAGGCCCTG GAGCCAGTTC CCAGCACCCA CACGGTGGCT CACAACCATC TGTAACTCCA GTTCTAGGAG ACCCGACTCC CTCTTCTGTC TGAAAACACC AGGCACGCGT GCGGTCTACA TACAAACATG AAAGCAAAAT ACACACATTA CATAAATAAA TCTTAAAAAA TGATTCGGGG TGGGGGAAGG AAAAAAAAGG ATGTTAGAAA ATCGATGTAA CTGTTTTTTC CTTTTGCACA GATCTAAGTT AGGGAAGGAG AACATTCTCT TACCATCGAA AATAATTGTT TTCATTGCCC CCAAGTCTGC TAATAGAGCT TGCTACCTTC ATGGCTGTCG TAAGGATGAG GCAAAGATGG ACTTCAGCTT TCAGACTGTG TCTGCTCAAA TGTTGGCTAC TCCTGTTTTC TGACCCCTT CTCTGGTGCA ATGTGGACTT TCAATTAATT TCCCTGCATC ATGCATGTCA ATAAGCATAT GTGTGTGTT TTCCATGGAA ACCAAGGCAA CAGATTTTCC AGAGCTGTAG AAATGGGCTG TGAGACGCCC ACTGTGGGTG TTCGGAACCA AACTCGGGTC CTGTGGAAAG ACAGCGAGCA CCCATAATGC AGAGGTATCT CTCAGATTTT ACTTTAAAAT TTCAATTTTC TTTTTTTTT TTAAAGTTCC AAGTAACTAT AGGAAAGTAC ATGGGTATAT AGATCCCCAG -3010 TACCAAGATT CTTCCTTTGC AGGTAGCACA ACTTGGTTTG TTTCACATAA AGAATGGAAA GTCATTAAAA CACTCATCAC ACTGTAAAGT AGAATTGAAC TCTGACAGAA CAAGCGAAGT GAGTCTGACT TCCAGGTAAC TGAGCCTTCT

Figure 1 continued

TTTCCTCCTA AAGACACAAG CCATACACAG AGTAAAATAA ACTTGGGCAT GGTGAGAAGG AAACAACGCA GGAGGGCTAG CCAAGTCTGA GAGTCGTGAG TGTGCTCGGT TTATAAACGG AGCCCACCTT GCCAGCGAGG TAGTCACATG CTCTGCTAAA CAGAAACTTA AGAAAACACT TACACGAAGC AAACATGGGG AAGTGCCATG CAAGCATGTG ACTGACTGGT GGCAATGACC GAAACCACAG CAGCCACTAG AAAAGGAAGG GTAGTGCGCC ACACTGTAGT TGTGAAAATG AACTTATTCA TTTATTTTGA AAAACGTGTA AGAAGCAAAG ATGTCTTCTT TCCCACCTAC CTTTGCGGCA GGCGAGCACT TCCTGGAATT TATAAAGTGC GATCTTTCTG GGGACTTCTC ATAACATTTC CTACTGCTCA TCTATGTCTG TGTCAAATAG AGAATGCTCT TGAACAAGTG TGTGTGTGTG TGTGTGTGCG CGCGCACGCG CACTCACTCC TGCTCTGTTG AGGTCCAGTT TTGATGGTCC CGCCAGAGGT ATATTTGAGT ATCATTTCTC AAGAGCTTCA GCTGGGAGAC ACTGCCTCTT ACTGCCCTGA AGGTCACTAG CTGATTCATC TCCGTTTGGG CTGGCGCGCC TTGGGGATEC TCCTATCTCT CCTTCCCCAG TGCTGGGATA ACAAGGTTGG CACCACATGA GCCTTTTAAA ATGTGAGTTT GGAAGCTCAA ACGCAGGTTT TCATGCTTGC ACTGAAACTT CACAAGCTGA ACCGTCTCCC TCTCCTTCCC TCTCTTTTTT CCTTTTCTTC TTCCTTTTTA AAACACATCT -2010 TGTCTTTAAA AAAAAAAAA GGCCCAAAAC AAGTGTAAAG TATTTCCCTA TGTGTGTGGA GGGAGGGAGT ATAGGAGGCT GATTTCACTG AGATCCTGTT AAATTTGGGT GCCATAGCCA ATCAAAGACG CATCGTTTCC TCTAAGAATT CTAAATGGGG CGATTACCAC GGGCCTGCAG GTTCTGGTTT GTATTAGAGG AGACACTGTC TTCTTAAGTA AAACATAGAA GGGGAAGTGT CCAGAATTGT AAATAAGGCT TCGAGAGAAG CCTTGTCTGG CCACCGGGAT GGAGAAGACC TACCTTCGCC TATCCAGGAT CCATCGTCCC TCCCTCTACC CAGATCTGAC AGCCCTCCTT GGCTCTTTTG CTGAGGTTTG TTTGAGTTTG TTTTACTCTC TGCAAGAGAA GTTTCCTTAA ACATTCTACC CTGTTCACAA GTAAATACAC CTCTTAGCTA AGAGGCCACA CACCCAGGGG GAACACCGAT AAAAAGAACA

Figure 1 continued

AGCCAGAACC TTCAGAACGC TGTCGATAGG TACACCAAGC AGCCTTCATA CGGAGTTTTC ATTCGTGAGG AGCTGAATAT ACAACAAAGC TAAATGTGAG CAGACCAGGC ATGCCTCTGC TAAATGAGGA TGCCCACACC AAACATGCCC AAGATCTTCA AGTATAATTT TATTATATAG ATTCGCTATG TGTTGACATG TTTTTATAGT GAACCTGGAT TTTACAAACC CTCCTGGTTT GCCACCTGCT TCTGGCACCA TACTTGAGGC TTAGGCACGT GATAAAGGAG CATGCCTGTT TCCCCCCTTA TTTTTTTAA AGAAAAGCAC CATGTTACAT CATTAATCAT GCATATCAGT GTAGTTTAGA TCCGATGTAG AGACAATAAT CTTATCTCTT TGTCTGGCTG AAAGACTGTC CTTTAAACTA TCATTCTAAA TGCATTTGGT TTTTGCCAGG AGTAAAACAT GTCACAAGAT ATTTGTTGTC ATTTCCCAGG -1010 CGTGGAAGGA AAGGAATGGA AAGAAAACCA GGGGTGAAGG CTGCTGTTCC TCTCTAGTCG CTACTTGAAG TCTACATAGC TGGGGGGGGG GGGGGGACTG TTCACATGGG ACCGGTTTCC TCTTTGTTCC TACACTGGCG CCTCTGGCAA AAAACTCTCC CTTCTCTCC CCCCAAGCAT ATCTTGGCTG AAAGGTCAGC TCTGAAAAGG GGCCTGGCCA AAGTTACTGT AGGGGACCGT GGTCATGGAA CTGGGTAAAC AAAAGCACTC TAGCAGCCAC TGGAAAAGGA CCGGGGGCTC TTCTCTGTGC ATTTGCCCTG GAACCCTGAC CACCGCCAGC TCCCTGCATC TCCTTGCTAT GGGTTTTCTG GACCGACCCA GCCAGGAAGT TCACAACCGA AATGTCTTCT AGGGCTAATC AGGTAACTTC GGACGATTTA AAGTTGCCAG ATGGACGAGA AAACAGTAGA GGCGTTGGCA ACCTGGATAA GCGCCTATCT -510 TCTAATTAAA ACATTCAGAC GGGGGGGGG ATGCGGTGGC CAAAGCACCA TAAAACAAAA CTTCCAAGTA CTGACCAACT CACTGCAAGT TTGTGCCCCG AGTACATCTA GGTTCAGGGG TTCTTGTCTT CATGCTCCCA ACTGCGGGCG GATTTTTGGT CCCTTGGGAC TTTCAGTGCA GCGGCGAAGA GAGTTCTGCA CTTGCAGGCT CCTAATGAGG GCGCAGTGGG CCTCGTGTTT CTGGTGATGC TTCCCAGGTT GCTGGGGGCA GCAAGTGTCT CAGAGCCCAT TACTGGCTAC ATTTTACTTC CACCAGAAAC CGAGCTGCGT CCAGATTTGC TCTCAGATGC

Figure 1 continued

GACTTGCCGC CCGGCACAGT TCCGGGGTAG TGGGGGAGTG GGCGTGGGAA

ACCGGGAAAC CCAAACCTGG TATCCAGTGG GGGGCGTGGC CGGACGCAGG

GAGTCCCCAC CCCTCCCGGT AATGACCCCG CCCCCATTCG CTAGTGTGTA

+1 (transcription start)

-10 GCCGGCGCTC TCTTTCTGCC CTGAGTCCTC AGGACCCCAA GAGAGTAAGC
TGTGTTTCCT TAGATCGCGC GGACCGCTAC CCGGCAGGAC TGAAAGCCCA
GACTGTGTCC CGCAGCCGGG ATAACCTGGC TGACCCGATT CCGCGGACAC
CGCTGCAGCC GCGGCTGGAG CCAGGGCGCC GGTGCCCCGC GCTCTCCCCG
GTCTTGCGCT GCGGGGGCGC ATACCGCCTC TGTGACTTCT TTGCGGGCCA

VRE

GGGACGGAGA AGGAGTCTGT GCCTGAGAAC TGGGCTCTGT GCCCAGCGCG AGGTGCAGGA TGGAGAGCAA GGCGCTGCTA GCTGTCGCTC TGTGGTTCTG CGTGGAGACC CGAGCCGCCT CTGTGGGTAA GAAGCCCACT CTTTAGTAGT AAGGCGGAGA AGTAGGGTGC GGGCGGAGAG TGGGAATAGA AGAGGACCTA ACTCGTAGAG CTCTAGAGAC CCTCCTCCCT TGGGTGTTCT TTCACTTACC +490 AATGGGGAAA CTGAGGTTCA AAGACTCTTC CGAAATGACT CAGCCAGGAT TCTACTCTCC CCCGGGCATC GGTTGGAGCG TGTCCTGCGG AGCCGTCACA GCCCCTGGCG CTAGGTAGGC AGGAGTGGAA AGGCGGCCTG AGCCGGGGCA GGAGATGCTC CCACTGGCAG GAACAGGCGG TCAAACGCTG GGAAGCCAGC TCAAGCCAAG CGGCCCGGCT GGCATCAATC ACTCGGTGCT GTTGCCCACC GCCCTAGTGG GGGGCAGGGA ATCCGCCTCT GGCTCCGCTC CCCTTTAGCT CCAGCGTGTA AGCGCACGGA CTATGTGAGG GTAGGTCTCT TCATAGAGCA ACACTTTCCT CCCTCAACTT TCTTTGATGC AGAATGCTAT TTTTGCTGGT AGGAGGAAGA CGCGGCTTTC TCTTCTGTGA CAGCTTCTCC AGGTGTATTA AACTAAATAA CTCTCCACTT ACCGACTCCA AAGCGCTGGT CCTGGGGTAA +990 ACTCTGAAAG TCTCAGAAAC TCTTGAGCTT GGCACCTAGT TATAGGTCAC TTTTCTTGTT TTAAAATGCC CTCTGCTTCA AGGTTAGGCC CACACTCGCT

## Figure 1 continued

CTTCCCTTCC CTTCCCTTCC CTTCCCTTTC CCTCTTCCTT TTCCTCCTCC TCTTCCTCCT CTATTTCTCT GTCATTTCCT TTTTGAAGCC ACAGTTTGCA GATTTCCAAT CTCCACCCAT TGGAGAATGG AGAATCAGGA AAAAAGAAGT CARTTCTGCA GAAACATTCC TTGCGCCCTA AGAGAATCGC ATGGCTTAAA AGCATTGGCA CTGACATACG GCGCCAAGAT CGCCTGTCTA GAGCTATTGA GTTTTCCTCA TAATGACTTG GTTCATCAGG CTAGCTCCAC CACGAGTGCC CTCTTGTTCC TGAGAAGGCC GCACTCTCCC CCTTTCTGGG AAGAGAAAGA CAGCCTGGAA CATGTGCTTG CCCTGGGTTC CATAGAGAAG CAAGTTGCTT TAAAGCCCAG AGAATTCCTA GTGTAGCAGC TTAACAGCGT CCCGTTCTCT GAATAAGATG GAGGTTGCCC TTTTGGAGTG TGTGACTTGC XhoI (+1600) \_ \* · TTAATTGGAT TGGGCTATAA TTGGTGCCAT CCAAGTCTCG AGACAGAGCC GCTGTTGTTT TTCCTTCTGG TCTTTGAGCG GGAAGGATAA CAGTGCACAA ATTAATTAAT GTTGGTTATC GGATTTGAAC ATAAAAGGGC TTTTATTGTA TAGTAGCATA TGTACCTCTT GCAGTCAGAA TGAGCTGTCT AAAGAACAGA ACCCAAACTT GCCGATGAAA ATGAATGAGG TTTAATAAAG GCGATGGATG AGCATTAGTC ACTGATGTAA ATCTCCAGTT ATTGATAACC TCATTGACTG GATTTGATTG CAGACATGTA TTGGTATGGG GCATCCTTTA AAGATGAGCA +1990 TAGCCAACGT GCCTGCACTC TAAGAGAATC TATGGCTGTA TGTTATTACA GAGACAGTTG AGAAGCTCTT AGTGGCTCTG GCGTGTAGAT CAGCGGTAGA GCGCTGAGGC TCTGCGCTCG CTTCCTGGCA CTGAAGAATA AAGGCCATTT ACTGTGGTGG TGCAGTGGGC GCAGTTTGTG ACGAGTTACT ACTACATTTT CCTCACACAT CTGCCTGACT AATGAGTTCA TCAGATGAGC GTATCCAGTG ATTGTTTGCA GGTTAATGGT TCTCAGTCAT GTTTAGAATC TACTTATCAA ACAAATTGTT TTCTCATTTC CTGCTTCTTC TCAAACAAAG TAAGATTCCA TTATTGAAAG GCTTGTTTAA GAGCATTTTA ACTGCTTGCC TATGTTAGGG

Figure 1 continued

ACAGTGACTT ATTICATATT GACAAATATT ATGCCGATTA ATTGAATATG ACTACCCAGT TCTATAGCTG TCTCAGGGCA GACCAAGAGC ATCTGTGATC CAGTCACTTT APATGCCATT TAAAATGCAT AATTTGTTGG TCTAGGAATA AACACACTGT AAAGTTTAGA ATCACGGCCC AAACACAAGT CTTTAACAAT GCCAACTAGC TTCTGAGATT CATTAATGTC ATTTAATTAC CAATGTTTTA AAAATATGTC ATTAATTACT AAATCTATAG TTGTAACAGC AACACATGTA CATCTTATTA AGTTGGGTAT ATTCAGGGTG GCATAGCTGT AGACTATTGC ACATCTGTGT TGGTGAGCCA GTGGAGAACT GCCTCCTGGC TGTTCTCAGA AGGCCACAGT GTCACGGCAT TGGCTATTTG CCTTGGCTCT TTGCTAATAC TTTATTGACA TGGCCTCATC TTCGTTCACG TTCACTTATT TGCCCAACAA CGTCAATGCC AGCTGAGGCC TTAGGAGTCA TCTGTTCTTA GTCAGTGCGA +2990 TGAGACAGAG TCTCACTGTG TGGCCCAGGC TAGTCTCAAA CTTGCGGTCC ATTTGTCTCA CTCATCAGAA TGCTGGGCTT CCAGGTGTGT GCACCACACT AGGTAGCTCG CGTTTTAAGC TAAGAGCTGG AAGATCCTGA TGTCCTTTAC CATGGTGGGC ATGTTACAGG TTAGTTGACT GAAAACTAGT TATCTCGCTG TGTAATGACC TGCAGTGGTA TGTATCTCTC AAGATGCTTT TTTGCATTTC AATCAGTTAG GTAACAAGTT CTTAAGTCTC CAGCTTGGTA TTGGCATGAG CTCAGAGCTT TGATTAATGA GTTGGGACCC CCTAGCTATT GCTCATTAGA CTTACACTAT TTTTAGTTTT GCTCTGAGTT TATGAATATG CATGTATGCA TGAACTTGGG AGATATTTTT CTTCCCCAAT TCCTTTTCCT CCATTTAAAT GTGCTGTCTT TAGAAGCCAC TGCCTCAGCT TCTGCAGCTC AGATACCAAA GGAAGTCTGG TACACAGCAT GATAAAAGAC AATGGGACGG GGTCACAGTG GCTCCCGTCC CTTTCAGGGG TATGGAGACG AGCTGTAGAG AGATGTCTCC AGGGAGTTTT CATTAATCAG CAATTTAGTC AGATCTGTGC ATCCTATGCT TTACAAGAA TGTCAGTGGG CCTGAGATCA TCAGATGGAG GTTCATCGGG TTTCAATGTC CCGTATCCTT TTGTAAGACC TTGAAGTTGG CAACGCAGGA

Figure 1 continued

AAACAGGAAC TCCACCCTGG TGCCGTGAAT TGCAGAGCTG TTGTGTTGGT
TTGTGACCAT CTGCCCATTC TTCCTGTTAT GACAGAGCTT GTGAACTTTA
ACTGGGACTG GGGCAAAGTC AATCCCACCT TTATACAATG AATTGCTGAA
GAGGCCTTTT AAAACTTGGA GTGTGCATTG TTTATGGAAG GGCTTTCCTA
BamHI (+3900)

TTGGATCCAA CTCTTTTCTA ATTTGTTTCT AGGTTTGCCT GGCGATTTTC +3990 TCCATCCCC CAAGCTCAGC ACACAGAAAG ACATACTGAC AATTTTGGCA AATACAACCC TTCAGATTAC TTGCAGGTAA GGATTCCTTT TTGAGCCAGC TTTCCTATGT GAAAGGACTC ATTGTTTACT GAGGTCACAA CAATTTCCAC TATTGCAGAA GTATAATAGT ATTGTTACAA TTGTTTATAA ATCATGAGAC TTCTAAGAAC CTATTTAATA ATGAAACAAT GGAAAAAGTC TTTTCAAACC TTTGTACTCT TTTGCTGAGC CGTTTTCAAC ATGCACAAAC ATATTACACA AATATAACAT ACACAGGAAC ACACATGAAT GCATGGGATG ATGTGCCTAA AACTAGCATG TAATTGATAT TCACAATTAT TGATAAATTA GTAAAGCAAA GGAATTCCTT ATGAATAGAG CTAAAATTCT ATCCATGTTC AAGTCACCCA GAATGGCTTC TGGACATTTT TTTTTTTAGC TGTTTTCTAC AAGTGAAATT CTGCCTGTAT TAGCAATTTA ATATCTAGCC AATAATATTC CTGACCATAT GTCCTGTTCA GACCATGACC TTCATAATCT GGCTTGATGT TCTGGGCTTC TTTCCCTCTT GCCAGCAAGA TGTCACGGTG TTGATGCTGG ATAAACTGAG AAACAGAAGT TTTTCGCAAG AAGAGGACCT TGAATTTTGC TTTTCCCCTG AGAGACAAGA AAGGAAACTT AGAGGAGGTG TAGCTGGGAG TGTGGTCATT CATGAAAGAC CTGTTTGCAG GGCAGTGTGT TTTGCTGGGG ACAGTAATGA GCCTAGATCG TAGTGCCATC CCAAGAGAGT GCTTGGTGGC AAAAAGAGCC CTAGCAGCTT GTGGCAGTTG CCTCATATTT GAAGAATACT AAGAGGTCCC CCGAATAACT CAGGGCTAGT GTTGATCATT GCATGTGGAG AGAATCCAAG CCTCCTATCT AGGGTCTACA AAAGTAACCA ATGCCCAGTC TTTGGGGGAA

Ĭ,

Figure 1 continued

+4990 AGCAAAACCA GAAAGCGATG ATAGCAGGAC CTGTTTATTT TCATTAAGTC ATGGCATTC CAGAGACTTT GCTCCCCCTA TTCTCAGACA CAAAGCCCAC TTAAGATCTC CCTCTGGAGA CTGCTGGGAA CATTTCTTAA GTTCTGAAAA AACCCTGGAG TGATTGGGCA CAGACGATCC TGTCACTTCA TGTGAGTGCT AAGCTCTTTG GGTGATGACT CAGTGGGTCA CATTGTTTTA TTCATATTGA CTACCTTCCG TTTGCTTTGC GGAGAATGGA AGCTATAGAA GTCTGTTTGG TGTGGCCCTC ACAAGGCACT GTGAGCTTCT TCTCTCTGTG TGCTAACTTC TTACTCTCCC TTGCTTATAC CCACATAGGG ACTCTGGCTT TGTTGCTGTT CTTCAATGCT TCAGATGTGC CCTGGGTCCT GTCTGTCCTT CACACTTACT GATGCTGCCT GGAATGCTAT TCCTCCCAAT GTGCATAGGG CCAGCTCGGT CCAAATCCTC TCTTTTCTTT GCCTCTTTTA TATTTTCCTT CACAGTATCA AATCACCACA GTTTATGCAA CAAACTGAAA CTTTAAAATT GTCTGTCTCC TTATATTAGT GATAGGTTCC AGAAAGGCAC TGATTTTTT TCTTCCCTGG TGTACACTGG GCAACTACTC TACCACTGAG CGTGATATCC TTGGTCCCTT AAAAGTTATC CTCTGTCCTT AATAATGCTT AGCAATCATA TTTGCTTAAA ATATTTATTG AATGACTGCA GGAATGAATG AATGAATGAG CTAACAGAAA ACTCATGACC ATGTGGGTGA TTTCCGAAAC AGAGTGTGAG ATCTTTGGTG GCATGTCCTT GTAGACTGTC TGCCACCAGT ATCTATCATC TTGAAGGTGA CTATTGAGTA GTTTATATGC ATGTGAAAAA CCAAACCTTC TATTCTCTTA CTCATAGCCT CTCTTAATCA TAGCCCTGTG GCATGGAGTG TACCATTGAT +5990 ATCTTCCTGG AATACTTTTT CAGGGGACAG CGGGACCTGG ACTGGCTTTG GCCCAATGCT CAGCGTGATT CTGAGGAAAG GGTATTGGTG ACTGAATGCG GCGGTGGTGA CAGTATCTTC TGCAAAACAC TCACCATTCC CAGGGTGGTT GGAAATGATA CTGGAGCCTA CAAGTGCTCG TACCGGGACG TCGAC (SEQ ID NO: 1)

Figure 1 continued

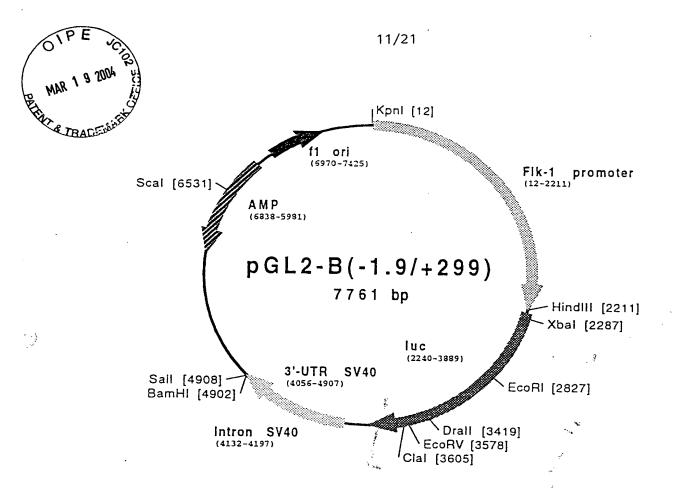
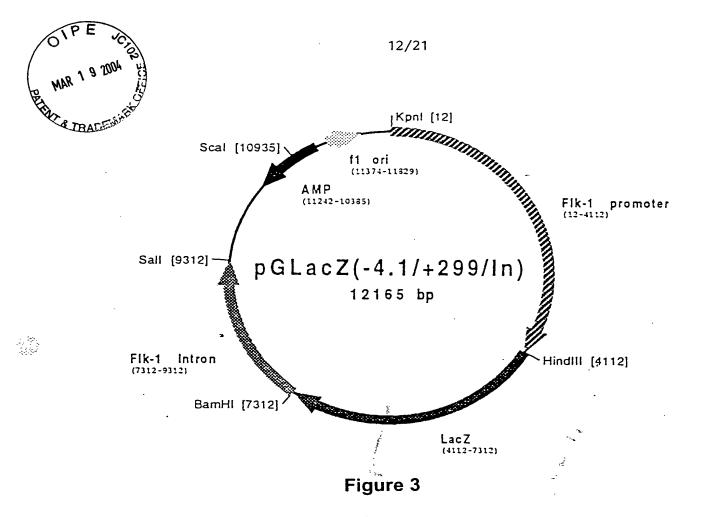
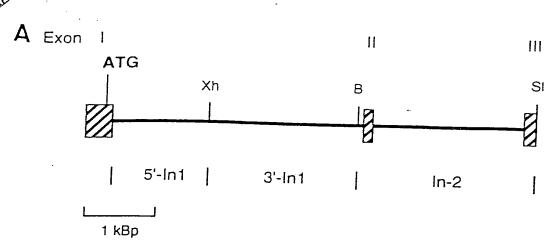


Figure 2

.





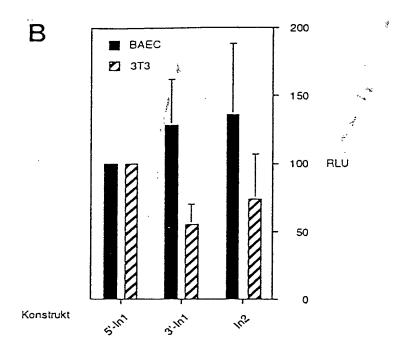


Figure 4





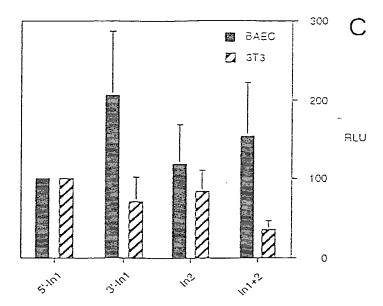


Figure 4 continued

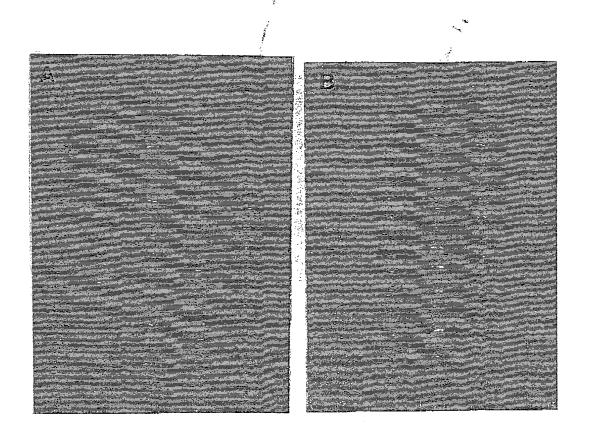


Figure 5



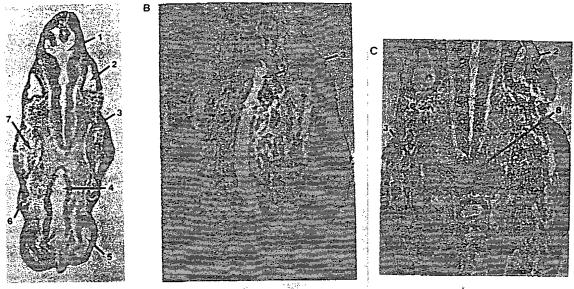


Figure 6

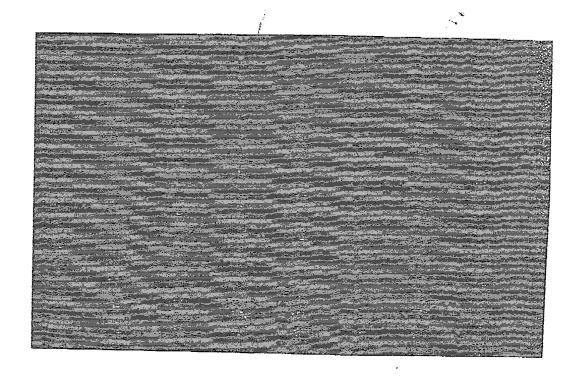


Figure 7





Figure 8

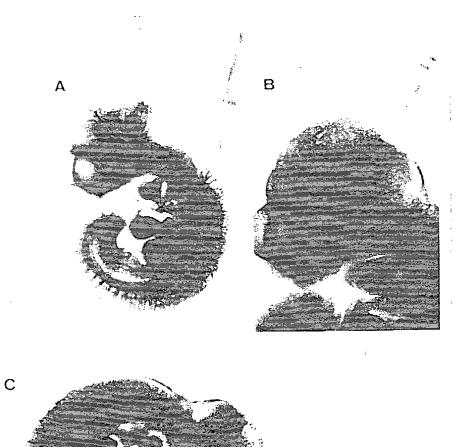


Figure 9



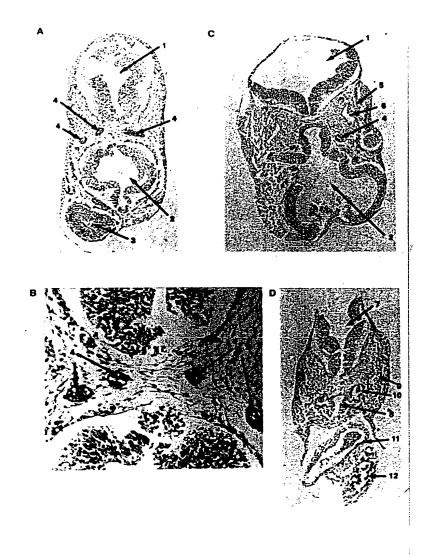


Figure 10



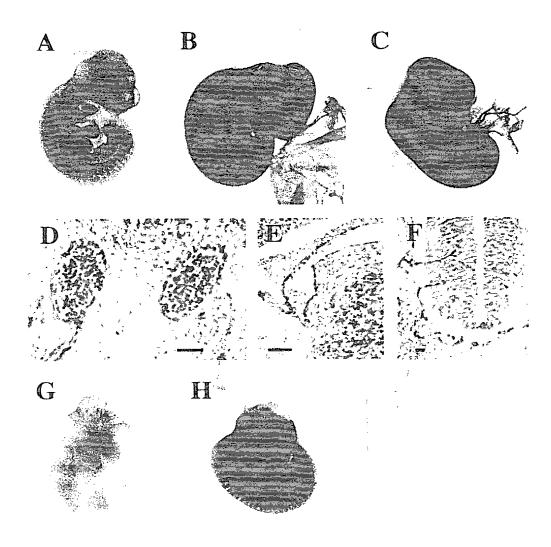


Figure 11



		GATA	PEA3	
AAATGTGCTGTCTTTAGAAGCCAC	TGCCTCAGCT	TCTGCAGCTCAG	ATACCAAAGGAAGTCTGGT	65
GATA	AP1			
ACAC <u>AGCATGATAAAAGA</u> CAATGO	G <u>ACGGGGTCA</u>	<u>CA</u> GIGGCTCCCG	ICCCTTTCAGGGGTATGGA	130
	NFkB		AP1	
GACGACCTGTAGAGAGATGTCTCC	A <u>GGGAGTTTT</u>	<u>C</u> ATTAATCAGCA	<u>ATTTAGICAGA</u> TCTGTGCA	195
STAT		SCL/TAL-	L	
TCCTATGCT <u>TTACAAGAA</u> ATGTCA	GTGGGCCTGA	G <u>ATCATCAGATG</u>	<u>GAGGT</u> TCATCGGGTTTCA <u>A</u>	260
Ets-1 GATA		Ets-1		
TGTCCCGTATCCTTTTGTAAGACC	TTGAAGTTGG	Caac <u>gcaggaaa</u>	<u>AC</u> AGGAACTCCACCCTGGT	325
	*2	SCL/TAL-1 Et	:s-1	
GCCGTGAATTGCAGAGCTGTTGTG	TICCITI <u>CIC</u>	ACCATCIGCCCA'	<u>PTCTTCCTGT</u> TATGACAGA	390
		-		
GCTTGTGAACTTTAACTGGGACTG	GGGCAAAGTC	AATCCCACCTTT	ATACAATGAATTGCTGAAG	455
AGGCCTTTTAAAACTTGGAGTGTG	CATIGITIAN	GGAAGGGCTTTC	TATIGGAIC	511

Figure 12

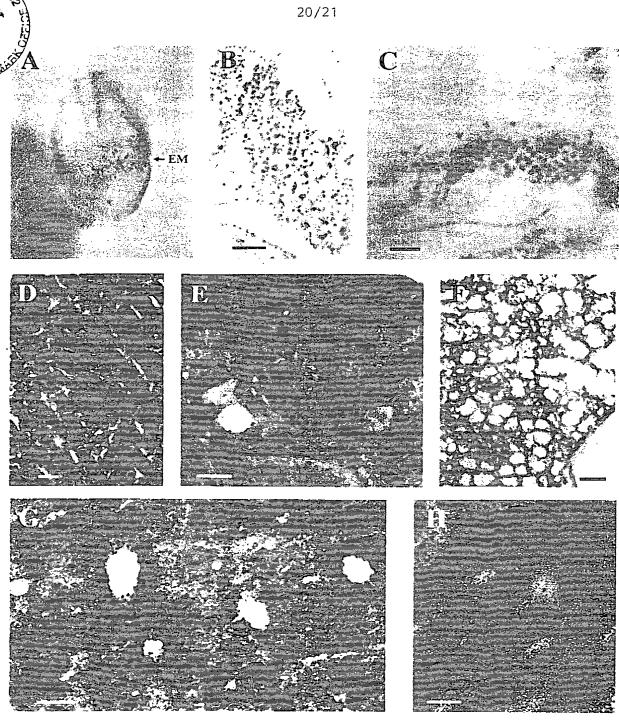


Figure 13



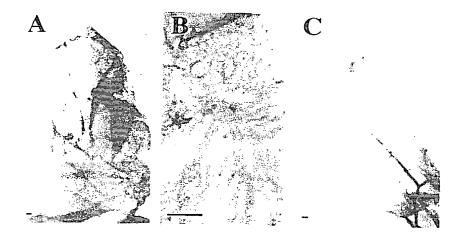


Figure 14

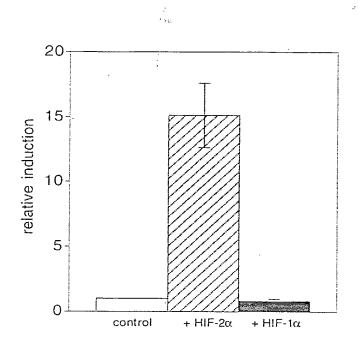


Figure 15